REMARKS

In accordance forgoing, claims 9, 11 and 17 have been cancelled, claims 4, 6, 8, 13 and 14 have been amended and new claim 19 has been added. Claims 1-8, 10, 12-16, 18 and 19 are being and under consideration.

Claims 11 and 17 are rejected under 35 U.S.C. § 112, second paragraph. These claims have been cancelled.

Claims 1-10, 12-16 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,785,042 to Onaka et al. Claims 11 and 17 are rejected under 35 U.S.C. § 103(a) as being obvious over Onaka et al. in view of U.S. Patent Publication 2003/0181074 to Seydnejad et al.

Onaka et al. relates to a method and apparatus for controlling a Raman amplifier. In Fig. 1 of Onaka et al., a tilt monitoring part 3 is provided upstream from a Raman amplification controlling part 4. The tilt monitoring part 3 receives a portion of the light output from the Raman amplification generating part 2. Referring to column 9, lines 4-10, the tilt monitoring part 3 monitors wavelength characteristics of optical transmission power. Referring to column 12, lines 58-67, the tilt monitoring part 3 monitors the wavelength characteristics of the light output from the Raman amplification generating part 2 by measuring an optical spectrum of the output light.

Onaka et al. does not disclose a component for deciding whether or not to cause an optical amplifier in an optical communication system to perform a slope correction. Referring to independent claim 1, Onaka et al. does not disclose acquisition means for acquiring the state of use of a Raman amplifier at a node the same as that of the optical amplifier, in a link opposing a link in which the optical amplifier exists, or the state of use of a Raman amplifier at a node downstream from the optical amplifier.

Although the claims are not restricted to what is shown in the drawings, the Examiner referred to Fig. 7 of the present application. At Node A, a monitoring controller monitors whether there is a Raman amplifier RAM in the link (downlink) associated with the WE side. If the optical amplifier PAM in the uplink at Node A is the optical amplifier of interest, this optical amplifier does not apply a slope correction because a Raman amplifier RAM exists in the downlink on the opposing side. Further, if the optical amplifier PAM in the uplink at Node B is the optical amplifier of interest, a Raman amplifier does not exists in the downlink on the opposing side, and therefore this optical amplifier applies slope correction. See the paragraph bridging 18 and 19 of the application. Clearly, Onaka et al. does not suggest such an acquisition means as claimed in

claim 1.

With regard to independent claim 4, Onaka et al. does not disclose acquisition means for acquiring the state of flattening-control implementation which indicates whether a Raman amplifier is implementing control to flatten a wavelength characteristic at a node downstream of the optical amplifier, based on the wavelength of characteristics on an input side or output side of the optical amplifier connected to the Raman amplifier. For anteceded basis purposes only, the Examiner is referred to Fig. 9. In Fig 9, a monitoring control signal is sent from Node C to Node B to indicate that a Raman amplifier is provided in Node C. Therefore, it is not necessary to perform slope correction at Node B, upstream from the Raman amplifier provided at Node C.

With regard to independent claim 8, Onaka et al. calculates the amount of slope correction for a Raman amplifier based on an output signal from the optical amplifier or an amount of tilt of a receiver. However, a calculating component in claim 8 calculates the amount of slope correction based on the amount of tilt of a wavelength characteristic produced in a transmission line between the Raman amplifier and a node at a receiving end. That is, the calculating component calculates the amount of slope correction based on the amount of tilt of a wavelength characteristic of a transmission line by acquiring an amount of tilt at an input section of each optical amplifier that is downstream from Raman amplifier, summing the amounts of tilt to produce an overall tilt, dividing the overall amount of tilt by the number of input sections downstream from the Raman amplifier to produce a result, and adding the result of division to a current amount of slope correction. Onaka et al. does not disclose these features. Accordingly, claim 8 patentably distinguishes over Onaka et al. Claim 13 has been amended to depend on claim 8. Accordingly, claim 13 is allowable for at least for the reasons discussed above.

With regard to independent claim 14, Onaka et al. discloses a method and apparatus for Raman amplifier for gain control. However, according to claim 14, the amount of tilt at an input section is acquired from each optical amplifier that exists between the transmission terminal and the reception terminal. According to claim 14, the amount of slope correction is decided for the optical amplifier in order, from an upstream side, using the amount of tilt. Onaka et al. in no way suggest these features.

Seydnejad et al. does not compensate for the deficiencies discussed above. In accordance with the forgoing amendments and remarks, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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